

## NEW USES FOR OLD TIN CANS.

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I give below the result of an extended experience in the utilization of tin cans, such as are used by the million by packers of fruits and other articles. These cans, after serving their original purpose, are usually thrown into obscure corners, battered and rusty, a nuisance to every one.

By the method given below these troublesome articles are made useful and even ornamental, such articles as flower-pots, hanging baskets, bird-houses, etc., being produced from them with little trouble or expense.

The cans were prepared in the following manner: Procuring a large dishpan, as much asphalt was melted in it as it would hold with safety. Into the boiling asphalt the cans were dipped; as each can was taken out it was rolled in dry sand, to give it a natural ground color; without the sand the effect of the black asphalt coating would be sombre and out of keeping with the color of the surroundings. To give some of these bird-houses a still more picturesque effect they were rolled in the ordinary dry packing moss used by florists and wood mosses; also short dry twigs, small cones, and burrs were fastened on the cans. In this way very nice effects of color were produced. It is a well known fact that birds avoid brilliant or artificial colors; for this reason greens, grays, browns, and neutral tints are best for bird-houses. Where cans had been opened so that the top piece was still attached by a small piece of metal, it was bent down so as to form a rest for the birds when feeding their young, or a porch or rain screen over the entrance. All these little points when carried out gave character, variety of form, and completeness. The different ways of fastening and suspending the bird-houses are shown in Fig. 1. I sometimes fastened branches of vines over the bird-houses to more thoroughly obscure them.

A glue-pot, a grater, a fruit gatherer, and a bailer, shown respectively in Figs. 2, 3, 4, and 5. The glue-pot, Fig. 2, was made in the following manner: Selecting an empty two pound can, enough tin was cut away to admit of an empty one pound can. This inner can projected one inch above the top of the one pound can, and was held in position by four wooden pegs, which were slightly tapering, so as to bind. Holes were made in the shoulders of the cans, through which wire bails were fastened.

Fig. 3, a bread grater, is so simple that it hardly needs describing. Out of a piece of one inch board a holder was shaped on which a perforated piece of tin was fastened. This piece of tin consists of a side of a fruit can flattened out. Tines were then drawn diagonally over it for guides when punching in the holes. The tin was laid on a piece of wood, in which a hole had been made of the exact depth required for the uniform projection of the burred cutters of the grater. The tin was then nailed to one side of the holder and bent over in as perfect a curve as possible to the other side, when it was again fastened.

Fig. 4, a peach gatherer, was made by attaching a circular piece of board to the end of a long pole and fastening to this a can. Inside of the can there was a bag to receive the fruit without bruising. The bag was sewn inside of the can through a circle of small perforations. The rim of the tin was sharpened, so that when pressed against the stem of the fruit it would cut through it.

Fig. 5 shows a liquid measure or a water bailer. A hole is made in a can two inches below the edge; through this hole a handle is inserted which presses against the opposite side and is secured with a nail or screw.

Fig. 6 represents a fruit can converted into a respectable looking flower pot. The can to be operated on was first dipped in the hot asphalt. A piece of well-seasoned white birch bark was cut out of the same height as the can and sufficiently long to reach around it. This piece of bark was so shaped that it flared out from the bottom of the can, leaving considerable space between the can and the bark. This space was filled in with hot asphalt. For ornamentation of the pots burrs of the liquid amber, black alder, and acorns were used. A hole must always be made in the bottom of the pots for the drainage of surplus water.

Fig. 7 is a hanging pot, planted with ferns. This was also covered with white birch bark, fastened on the straight sides of the can with asphalt. Three wires, by which it was suspended, were fastened to the rim of the can. In using cans for flower-pots or hanging baskets care should be taken to thoroughly coat the insides and outsides with the asphalt; this secures the tin from rusting.

Fig. 8, a hanging log, was made by partially telescoping two cans together, after the opened end had been entirely removed.

A section of the side of each can was cut out, to leave an opening for the reception of the soil and plants. The cans were then heavily coated with asphalt, particularly where the cans joined, so as to strengthen the joint. Barks of chestnut and oak trees were used for covering the cans.

Fig. 9 is a standard for plants and flowering bulbs. Having secured an old centre-table, two cheese boxes of different sizes were placed one on top of the other, the smaller one on top. Around the side of the lower box fruit-can flower pots were ranged, above these ranged another circle of pots, which stood on top of the largest cheese box and against the side of the smaller one. On top of the smallest box more pots were placed, so that but little of the cheese boxes could be seen. All the pots were ornamented with burrs, cones, lichens, or barks. The spaces left between the boxes were filled in with wood mosses. Around the rim of the table was nailed hooping from a flower barrel. The inner angle formed by the hooping and the top of the table was patched with putty. Over the entire top of the table, the hooping, and the putty, hot asphalt was applied with a brush. This rendered the top of the table watertight, so that when watering the plants water could not run on the floor. A hole bored through the top of the table afforded an escape for surplus water. The cheese boxes were coated inside and outside with asphalt, to prevent them from warping. The open space between the first circle of pots and the rim of the table was filled in with earth, on top of which moss was built up to the first circle of pots. The plants used were tradescantia, German ivy, English ivy, vincas, saxifrage, hyacinths, and calla lily.

Fig. 10 show the complete plant standard. In hanging baskets, pots, and standards, where the plants are planted closely together and in a comparatively small bulk of soil, they require frequent watering and occasional applications of liquor manure. Our fowls provide us with a very fair article of "domestic guano," from which we make good liquid manure of sufficient strength by mixing one shovelful to a barrel of water. Still there is danger in a too generous use of liquid manure; if too strong or too frequently used the tender roots of the plants are injured and the leaves begin to fall.

Fig. 11 is a fern rockery for table or Wardian case. For the rockwork the most picturesque of rocks in form and color were selected. The rocks were fastened together with plaster of Paris, which was mixed with dry colors, grays and browns predominating. As fast as the plaster was applied sand was thrown on it. The effect of the coloring and sanding of the plaster was to destroy its whitely glazing look, and to harmonize it with the general colors of the rock work. The cans used for the flower-pots were first wrapped in wet paper, to increase them in size, before applying the plaster against them when building up the rock work. In a few hours the paper wrappings had so dried that the pots were easily withdrawn, after which the paper was removed and the pots put back in their places.

Fig. 12 is a vase for dried grasses and autumn leaves, which was constructed as follows: To the top of a broken-off lamp standard of glass was fastened a fruit can that had been previously dipped in asphalt. The outside of the can was then carefully covered with selected lichens and tufts of "sealing wax moss." Shells and parts of pine cones were used for ornamentation.

THE TRANSMISSION OF SCARLET FEVER BY MILK.—A report has been issued by the Local Government Board on a sudden outbreak of scarlet fever at Fallowfield, near Manchester, England. The outbreak included 35 persons, belonging to 18 families, and of the individuals who suffered, not less than 24 were attacked within 36 hours, between Sunday morning and Monday evening. Dr. Airy was directed by the Local Government Board to investigate this outbreak, and the results of his investigation are, says the *Lancet*, given in the report now before us. The outbreak was quite local, and the different details elicited tended to the general result that the infection had been distributed to the families through the agency of a particular milk supply. The facts bearing on this point do not well admit of any other interpretation. The question of the mode in which the milk could have become infected was not so fully cleared up, but it is shown that one of the milkers on the dairy-farm lodged in a farm house where scarlet fever was present at the time when the milk presumably became infected, and it is suggested that the infection was communicated to the milk, in some way undetermined but not inconceivable, through his agency. The report throughout is of very considerable interest, and forms an important contribution to our knowledge of the mechanism, if we may so write of certain of the observed phenomena marking the progress of infectious diseases.